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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/807,580 | 04/13/2001 | Albert Hasper | NEDER24.001A | 2074 |

20995 7590 06/21/2002

Knobbe Martens Olson & Bear LLP
620 Newport Center Drive
Sixteenth Floor
Newport Beach, CA 92660

EXAMINER

FOX, CHARLES A

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3652

DATE MAILED: 06/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,580

Applicant(s)

HASPER ET AL.

Examiner

Charles A. Fox

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 11 April 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 8,9,13, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Muka. In regards to claim 8 Muka (US 6,079,927) discloses a device for storing wafers in cassettes comprising:

a housing;

a wafer handling device (230) arranged in a chamber (262) configured to be sealed in respect to said housing;

a part (172,174) for receiving at least 2 closable cassettes arranged in the housing and separated from said chamber by a partition, said part (172,174) configured to position a cassette against a closable opening, wherein said cassette and said closable opening are opened so that said wafer handling device can remove or place wafer from and to said cassettes;

a store (110) for closable cassettes arranged within the housing;

a handling device (190) for closable cassettes arranged in the housing, wherein the store and the device for handling (190) closable cassettes and the part

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(172,174) for receiving cassettes are separate, and the wafer handling device is adapted to transfer wafers from a first cassette to a second cassette.

In regards to claim 2 Muka further discloses that the device is configured to sort wafers stored in front opened unified pods (FOUPs).

In regards to claims 13 and 15 Muka discloses a method of assembling a batch of wafers in a cassette comprising the steps of:

placing at least a first and second closed cassette in a store;
employing a cassette handling device to select and move a first cassette from the store to a sorting operation, wherein the first cassette is opened and placed in active connection with a wafer handling device in a chamber;
employing a cassette handling device to select and move a second cassette from the store to a sorting operation, wherein the second cassette is opened and placed in active connection with a wafer handling device in a chamber;
employing a wafer handling device to sort wafers by transferring the wafers between the first and second cassettes, wherein the chamber is sealed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muka as applied to claims 8 and 13 above, and further in view of Cheng. In

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regards to claim 10 Muka teaches the limitations of claim 8 as above, he does not teach testing the wafers. Cheng (US 6,164,894) teaches a wafer handler (14) that is functionally connected with a wafer measuring station (85). It would have been obvious to one of ordinary skill in the art, at the time of invention to add measuring station as taught by Cheng to the apparatus taught by Muka in order to test the wafers automatically after processing, therein making the process faster and more precise.

In regards to claim 14 Muka teaches the limitations of claim 13 as above, he does not teach the step of testing the wafers. Cheng teaches a method of wafer handling whereby a wafer is tested at a wafer measuring station. It would have been obvious to one of ordinary skill in the art, at the time of invention to add the measuring step taught by Cheng to the methods taught by Muka in order to test the wafers automatically after processing, therein making the process faster and more precise.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muka as applied to claim 8 above, and further in view of Rush et al. Muka teaches the limitations of claim 8 as above he does not teach the use of a turntable. Rush et al. teach a wafer transfer machine that makes use of a turntable (12) to hold wafer carriers (24). It would have been obvious to one of ordinary skill in the art, at the time of invention that the receiving stations taught by Muka could be a turntable as taught by Rush et al. in order to allow a second cassette to be placed on the turntable while a first cassette is in communication with the wafer handler, therein allowing the cassettes to be interchanged rapidly decreasing the wait time of the processing unit.

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Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muka as applied to claim 8 above, and further in view of Garric et al. Muka teaches the limitations of claim 8 as above, he does not teach the store as being a rotatable magazine. Garric teaches a store (300) for wafer cassettes (100) that is a rotatable magazine. It would have been obvious to one of ordinary skill in the art, at the time of invention that the store taught by Muka could have been replaced by a rotatable store as taught by Garric et al. as the rotatable magazine is considered to be a conventional means of storing wafer cassettes.

The prior art made of record and not relied upon, but considered pertinent to applicant's disclosure is: Iwai et al (1996) and Perlov et al. (2001).

Response to Amendment

The amendments to the specification and claims set forth in paper number 7, and the proposed drawing correction of paper number 8 have been entered into the record.

Response to Arguments

Applicant's arguments with respect to claims 8-14 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Fox whose telephone number is 703-605-4294. The examiner can normally be reached between 7:00-4:30 Monday-Thursday and on alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached at 703-308-3248. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.


EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

caf
June 12, 2002
CAF
6-12-02